

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

- 1-6. (Cancelled)
7. (Currently Amended) A method for fixed bit rate, intraframe compression of video, including a sequence of images, comprising, for each image:
transforming portions of the image to generate frequency domain coefficients for each portion;
selecting a quantization matrix according to the desired bit rate;
determining a bit rate for each transformed portion using a plurality of scale factors;
estimating distortion for each portion according to the plurality of scale factors;
selecting a scale factor for each portion to minimize the total distortion in the image to achieve a desired bit rate;
quantizing the frequency domain coefficients for each portion using the selected quantization matrix as scaled by the selected scale factor for the portion;
entropy encoding the quantized frequency domain coefficients using a variable length encoding to provide compressed data for each of the defined portions; and
outputting the compressed data for each of the defined portions to provide a compressed bitstream at the desired bit rate;
~~The method of claim 1,~~ wherein entropy encoding comprises:
for each nonzero value not preceded by a zero value, determining whether the nonzero value is in a base range or an index range;
for each nonzero value not preceded by a zero value and in the base range, encoding the nonzero value using a code word from a first set of code words;
for each nonzero value not preceded by a zero value and in the index range, determining an index and encoding the nonzero value using a code word from a second set of code words, followed by the index;

for each nonzero value preceded by a zero value, determining whether the nonzero value is in a base range or an index range;

for each nonzero value preceded by a zero value and in the base range, encoding the nonzero value using a code word from a third set of code words and encoding the zero value using a code word from a fifth set of code words and after the code word for the nonzero value; and

for each nonzero value preceded by a zero value and in the index range, determining an index and encoding the nonzero value using a code word from a fourth set of code words, followed by the index and encoding the zero value using a code word from the fifth set of code words and after the code word for the nonzero value.

8-10. (Cancelled)